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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/645,206	08/25/2000	Gordon Bremer	061607-1300	4403

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EXAMINER
BARNIE, REXFORD N

ART UNIT	PAPER NUMBER
2643	3

DATE MAILED: 09/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/645,206	BREMER ET AL.
Examiner	**Art Unit**
REXFORD BARNIE	2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Aug 25, 2000* .

2a) ☐ This action is **FINAL.** 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-65* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-65* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

R Barnie
REXFORD BARNIE
PRIMARY EXAMINER
09/15/03

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 U.S.C. § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted prior art (see fig. 2) in view of {Sciacero et al. (US Pat# 5,502,391) or Arnett et al. ('834 or '742)} and further in view of Agazzi et al. (US Pat# 4,669,116).

Regarding claims 1 and 37, Admitted prior art of record teaches a digital communication wherein mutual coupling can cause crosstalk and fails to teach a cross talk compensation circuit made of capacitive means as a form of reducing crosstalk. Reducing crosstalk is notoriously well known.

Sciacero et al. teaches an apparatus for measuring the crosstalk in a cable associated with a network by using capacitive circuit for the purpose of reducing crosstalk caused by coupling effect in (see fig. 3B, col. 3 lines 12-17, col. 5).

Arnett teaches a capacitive crosstalk compensation arrangement fro communication connectors wherein a capacitive circuit can be used in preventing cross-talk caused by mutual coupling associated with a plurality of conductors in (see fig. 6 and disclosure of '742). Also, '834 teaches a connector which provides a crosstalk compensation by means of a capacitive circuit in (see fig. 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Sciacero or Arnett by providing a crosstalk compensator to which communication devices can be connected to reduce crosstalk coupling and to enhance clarity of signals by reducing noise.

The combination fails to teach selectively coupling by means of a relay or switch to the capacitive circuit.

Agazzi teaches a non-linear cancellation of signals including echo or cross-talk in conjunction with data signals in (see col. 1 lines 17-20) by using a capacitive circuit with a plurality of capacitors in parallel which can be activated by means of a relay in conjunction with a controller in (see fig. 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Agazzi into that of the combination thus

making it possible to activate a crosstalk circuit to prevent noise or interference with a desired signal.

Regarding claims 2-32, 33-36 and 38-47, The combination teaches being able to use a plurality of capacitors in parallel in reducing crosstalk and would have been obvious to one of ordinary skill to use any functional equivalent capacitive means. Furthermore, the combination for instance Agazzi teaches a plurality of capacitors in parallel under control of a control logic which can activate a capacitors by means of a relay. Crosstalk as defined and well known would be reduced if not canceled by the capacitive circuit taught by the combination.

Regarding claims 33, Admitted prior art of record teaches a digital communication wherein mutual coupling can cause crosstalk and fails to teach a cross talk compensation circuit made of capacitive means as a form of reducing crosstalk. Reducing crosstalk is notoriously well known.

Sciacero et al. teaches an apparatus for measuring the crosstalk in a cable associated with a network by using capacitive circuit for the purpose of reducing crosstalk caused by coupling effect in (see fig. 3B, col. 3 lines 12-17, col. 5).

Arnett teaches a capacitive crosstalk compensation arrangement fro communication connectors wherein a capacitive circuit can be used in preventing cross-talk caused by mutual coupling associated with a plurality of conductors in (see fig. 6 and disclosure of '742). Also, '834 teaches a connector which provides a crosstalk compensation by means of a capacitive circuit in (see fig. 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Sciacero or Arnett by providing a crosstalk compensator to which communication devices can be connected to reduce crosstalk coupling and to enhance clarity of signals by reducing noise.

The combination fails to teach selectively coupling by means of a relays or switches to the capacitive circuit.

Agazzi teaches a non-linear cancellation of signals including echo or cross-talk in conjunction with data signals in (see col. 1 lines 17-20) by using a capacitive circuit with a plurality of capacitors in parallel which can be activated by means of a relay in conjunction with a controller in (see fig. 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Agazzi into that of the combination thus making it possible to activate a crosstalk circuit to prevent noise or interference with a desired signal. Note that the combination including Agazzi teaches a crosstalk circuit which includes a four conductors system in conjunction with relays.

Regarding claim 48, see the explanation as set forth regarding claim 1 because the system would perform the method steps.

Regarding claims 49-61, see the explanation as set forth regarding claims 2-32, 33-36, 38-47.

Regarding claim 62, see the explanation as set forth regarding claim 1 because the system would perform the method steps by using a computer readable medium.

Regarding claims 63-65, see the explanation as set forth regarding claims 2-32, 33-36, 38-47.

CONCLUSION

3. Any inquiry concerning this communication or earlier communication from the examiner should be directed to REXFORD BARNIE whose telephone number is (703) 306-2744. The examiner can normally be reached on Monday through Friday from 8:30 to 6:OOp:m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached on (703) 305-4708.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or **faxed to (703) 872-9314** and labeled accordingly (Please label **"PROPOSED/INFORMAL" or "FORMAL"**).

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 306-0377.

Rexford Barnie

Patent Examiner

RB 09/15/03.

R Barnie

REXFORD BARNIE

PRIMARY EXAMINER